

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2007; month=11; day=21; hr=10; min=13; sec=39; ms=737;  
]

=====

Application No: 10534010

Version No: 1.0

**Input Set:****Output Set:****Started:** 2007-10-31 14:10:09.292**Finished:** 2007-10-31 14:10:10.981**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 689 ms**Total Warnings:** 40**Total Errors:** 0**No. of SeqIDs Defined:** 41**Actual SeqID Count:** 41

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

**Input Set:**

**Output Set:**

**Started:** 2007-10-31 14:10:09.292  
**Finished:** 2007-10-31 14:10:10.981  
**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 689 ms  
**Total Warnings:** 40  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 41  
**Actual SeqID Count:** 41

Error code

Error Description

This error has occurred more than 20 times, will not be displayed

# SEQUENCE LISTING

<110> THE JOHN HOPKINS UNIVERSITY

<120> ENGINEERED RNAi ADENOVIRUS SILENCING EXPRESSION (ERASE)  
OF DNA REPAIR PROTEINS

<130> 59564-PCT (71699)

<140> 10534010

<141> 2007-10-31

<150> PCT/US03/36367

<151> 2003-11-12

<150> 60/425,897

<151> 2002-11-12

<160> 41

<170> PatentIn Ver. 3.2

<210> 1

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 1

tagctctatc atgttctagt tgacggcaga agcttgtgcc gtcgactagg acatggtaga 60  
gttacagttt ttt 73

<210> 2

<211> 79

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 2

gatcaaaaaa ctgtaactct accatgtcct agtcgacggc acaagcttct gccgtcaact 60  
agaacatgat agagctacg 79

<210> 3

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

target sequence

<400> 3

tgccgtcaac tagaacatga tagagctaca g

31

<210> 4

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 4

cctggaggct tgtgttgagg ctgatacaga agcttggtga tcagcctcag cataagcctc 60  
cgggtagttt ttt 73

<210> 5

<211> 79

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 5

gatcaaaaaa ctacccggag gcttatgctg aggctgatac acaagcttct gtatcagcct 60  
caacacaagc ctccaggcg 79

<210> 6

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 6

tgtatcagcc tcaacacaag cctccaggca g

31

<210> 7

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 7

tagtatgttg ctacaatcag ctccgtaaga agcttggttac ggagctgatt gtggcgacgt 60  
attactcttt ttt 73

<210> 8

<211> 79

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 8

gatcaaaaaa gagtaatacg tcgccacaat cagctccgta acaagcttct tacggagctg 60  
attgtagcaa catactacg 79

<210> 9

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 9

ttacggagct gattgtagca acatactact c 31

<210> 10

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 10

tattatattc ctctggtgtg gcaactgccga agcttgggca gtgtcacact agagggatat 60  
agtacagttt ttt 73

<210> 11

<211> 79

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 11

gatcaaaaaa ctgtactata tccctctagt gtgacactgc ccaagcttcg gcagtgccac 60  
accagaggaa tataatacg 79

<210> 12  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 12  
ggcagtgccca caccagagga atataatata g 31

<210> 13  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 13  
ttgctgcaat ccgcagaagt ctcgttatga agcttgataa tgagacttct gcggattgta 60  
gtaattcttt ttt 73

<210> 14  
<211> 79  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 14  
gatcaaaaaa gaattactac aatccgcaga agtctcatta tcaagcttca taacgagact 60  
tctgcggatt gcagcaacg 79

<210> 15  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 15  
ataacgagac ttctgcggat tgcagcaacc 30

<210> 16

<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 16  
ctcatgacca ctggccattc cacagcatga agcttgatgc tgtggagtgg ccggtgggta 60  
tgagtcgttt ttt 73

<210> 17  
<211> 79  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 17  
gatcaaaaaa cgactcataa ccaccggcca ctccacagca tcaagcttca tgctgtggaa 60  
tggccagtgg tcatgagcg 79

<210> 18  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 18  
atgctgtgga atggccagtg gtcatgagcc g 31

<210> 19  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 19  
atgtctgtaa tgccagcacc gcggggctga agcttgagcc tcgtgggtgct ggtattacag 60  
atatcttttt ttt 73

<210> 20  
<211> 79  
<212> DNA



<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 20

gatcaaaaaa aagatatctg taataaccagc accacgagge tcaagettca gccccgcggt 60  
gctggcatta cagacatcg 79

<210> 21

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 21

agccccgcgg tgctggcatt acagacatct t 31

<210> 22

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 22

gatgaacttc acccaataat cctaggagga agcttgcttc taggattatt gggtaggatt 60  
cgtcttattt ttt 73

<210> 23

<211> 79

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 23

gatcaaaaaa taagacgaac tccaccaat aatcctagaa gcaagcttcc tcctaggatt 60  
attgggtgaa gttcatccg 79

<210> 24

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 24

ctcctaggat tattgggtga agttcatcct a

31

<210> 25

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 25

tgaagttgca cagaagtgag gacaaccga agcttgggggt tgttcttact tctgtgcagc 60  
ttcattattt ttt 73

<210> 26

<211> 79

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 26

gatcaaaaaa taatgaagct gcacagaagt aagaacaacc ccaagcttcg gggtgtcctc 60  
acttctgtgc aacttcacg 79

<210> 27

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 27

gggtgtcct cacttctgtg caacttcact a

31

<210> 28

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>  
<221> modified\_base  
<222> (29)..(36)  
<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 28  
tagctctatc atgttctagt tgacggcann nnnnnntgcc gtcgactagg acatggtaga 60  
gttacagttt ttt 73

<210> 29  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>  
<221> modified\_base  
<222> (29)..(36)  
<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 29  
cctggagggt tgtgttgagg ctgatacann nnnnnntgta tcagcctcag cataagcctc 60  
cgggtagttt ttt 73

<210> 30  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>  
<221> modified\_base  
<222> (29)..(36)  
<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 30  
tagtatgttg ctacaatcag ctccgtaann nnnnnnttac ggagctgatt gtggcgacgt 60  
attactcttt ttt 73

<210> 31  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>

<221> modified\_base

<222> (29)..(36)

<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 31

tattatattc ctctggtgtg gcaactgccnn nnnnnnggca gtgtcacact agagggatat 60  
agtacagttt ttt 73

<210> 32

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>

<221> modified\_base

<222> (29)..(36)

<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 32

ttgctgcaat ccgcagaagt ctcgttatnn nnnnnnataa tgagacttct gcggattgta 60  
gtaattcttt ttt 73

<210> 33

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>

<221> modified\_base

<222> (29)..(36)

<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 33

ctcatgacca ctggccattc cacagcatnn nnnnnnatgc tgtggagtgg ccggtgggta 60  
tgagtcgttt ttt 73

<210> 34

<211> 73

<212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<220>  
 <221> modified\_base  
 <222> (29)..(36)  
 <223> "n" may be a, t, c or g; see specification for various  
 other descriptions.

<400> 34  
 atgtctgtaa tgccagcacc gcggggctnn nnnnnnagcc tcgtggtget ggtattacag 60  
 atatcttttt ttt 73

<210> 35  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<220>  
 <221> modified\_base  
 <222> (29)..(36)  
 <223> "n" may be a, t, c or g; see specification for various  
 other descriptions.

<400> 35  
 gatgaacttc acccaataat cctaggagnn nnnnnncttc taggattatt gggtaggagtt 60  
 cgtcttatttt ttt 73

<210> 36  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<220>  
 <221> modified\_base  
 <222> (29)..(36)  
 <223> "n" may be a, t, c or g; see specification for various  
 other descriptions.

<400> 36  
 tgaagttgca cagaagtgag gacaaccenn nnnnnnggggt tgttcttact tctgtgcagc 60  
 ttcattatttt ttt 73

<210> 37  
<211> 179  
<212> DNA  
<213> Human adenovirus type 5

<400> 37  
ctctggcggg tcaggcgcg cgaatcggtg acgtctctaga ccgtgcaaaa ggagagcctg 60  
taagcgggca ctcttcctg gtctgggtga taaattcgca agggatcat ggcgacgac 120  
cggggttcga gcccgtatc cggcgctccg ccgtgatcca tgcggttacc gcccgctg 179

<210> 38  
<211> 127  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
promoter sequence

<400> 38  
ggccgcgggg aggagtcctg ggtctggatt ccaattcagc gggagccacc tgatgaagct 60  
tgatcgggtg gctctcgctg agttggaatc ctttttggat ccaccggggt tcgagccccg 120  
cttaaga 127

<210> 39  
<211> 127  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
promoter sequence

<400> 39  
gatctcttaa ggggggctcg aaccccggtg gatccaaaaa ggattccaac tcagcgagag 60  
ccaccgcatc aagcttcctc aggtggctcc cgctgaattg gaatccagac cagcgactcc 120  
tccccgc 127

<210> 40  
<211> 130  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
promoter sequence

<400> 40  
ggccgcgggg aggagtcctg ggtctggatt ccaattcagc gggagccacc tgatgaagct 60  
tgatcgggtg gctctcgctg agttggaatc ctttttggat ccaccggggt tcgagccccg 120  
cttaagacta 130

<210> 41

<211> 126

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
promoter sequence

<400> 41

```
tagtcttaag cggggctcga accccggtgg atccaaaaag gattccaact cagcgagagc 60
caccgatca agcttcatca ggtgggtccc gctgaattgg aatccagacc acggactcct 120
ccccgc                                           126
```